August 2005

Army Industrial Hygiene News and Regulatory Summary

This information is published by the Industrial Hygiene and Medical Safety Management (IHMSM) for the U.S. Army Center for Health Promotion and Preventive Medicine as a service to the Army Industrial Hygiene Program, Federal agencies, and industrial hygienist throughout the Federal and private sector

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TOPIC OF THE MONTH-DEPLOYMENT

Force Health Protection Conference Presentation

Indoor Air Quality: Formaldehyde Air Sampling Inside Military Buildings and Shelters in Iraq

Military health professionals at Camp Liberty in Iraq were concerned that many newly constructed buildings and shelters were off-gassing elevated levels of formaldehyde. The culprit was the adhesive based plywood used to build the structures. The plywood reportedly originated from Brazil, China and Syria. The Soldiers procure the building materials from the local market when available.

Our USACHPPM IHFSP was charged with the task of developing an Indoor Air Quality (IAQ) sampling survey strategy. Our objective was to develop a sampling strategy to be executed by the medical unit forward deployed in Iraq to measure the levels of formaldehyde that Soldiers of the 2nd Brigade Combat Team/10th Mountain Division were being exposed to while occupying buildings. The IAQ sampling was conducted in several building structures, such as administrative offices (Tactical Operations Center), sleeping quarters, gym, internet café, and the ambient outdoor air. Air sampling consisted of personal breathing zone, general area, and instantaneous spot direct reading measurements. Air sampling results were compared to an "Interim Military Exposure Guideline" for formaldehyde.

Because the population at risk is deployed military personnel, who may be exposed up to 24 hours per day, seven days per week, military unique health criteria had to be applied. Exposure criteria for deployed personnel were derived from the USACHPPM Technical Guide 230, "Chemical Exposure Guidelines for Deployed Personnel". The military population is assumed to be "healthy and fit" and often believed to be less susceptible to the adverse health effects caused by

chemical exposures than the general (civilian) population. For evaluation criteria purposes, the military uses Military Exposure Guidelines (MEGs). The MEGs are used to characterize the level of health and mission risks associated with identified or anticipated exposures to chemicals in the deployment environment. The purpose of the MEGs is to provide protection to Soldiers from chemical exposures during deployments. The following MEGs were used for this deployment scenario:

Air MEG type	1-hr Sev MEG (mg/m^3)	1-hr Sig MEG (mg/m^3)	1-hr Min MEG (mg/m^3)	8-hr Air MEG (mg/m^3)	1-14 day Air MEG (mg/m^3)	1-yr Air MEG (mg/m^3)
New Interim Air MEGs (Feb 05)	69 AEGL-3	17 AEGL-2	1.1 AEGL-1	1.1 AEGL-1	0.37 CEGL	0.25 MRL-adj
PPM conversion	56.24 ppm	13.86 ppm	0.90 ppm	0.90 ppm	0.30 ppm	0.20 ppm

A side-by-side air sampling strategy was employed for personal Breathing Zone (BZ) and General Area (GA) monitoring using 3M™ formaldehyde passive dosimeters and AccuCard™ formaldehyde passive monitoring cards. The AccuCard™ formaldehyde passive monitoring cards were read at the conclusion of each sampling period and the 3M™ formaldehyde passive dosimeters were analyzed at an American Industrial Hygiene Association (AIHA) accredited laboratory. In addition, Draeger-Tube© sampling detector tubes were used to collect a grab sample and provide a direct reading measurement of the level of formaldehyde.

Ten percent of the 3M™ formaldehyde samples were above the (1-14 day) Air MEG. Three percent of the AccuCard™ formaldehyde passive monitoring cards designed for testing 8-hour exposures were above the (1-14 day) Air MEG. The STEL AccuCard™ formaldehyde passive monitoring cards were utilized to compare the ACGIH Threshold Limit Value, a ceiling limit, of 0.3 parts per million (ppm). Nineteen percent of the samples were above this ceiling limit. Based on the data collected, we were able to document exposures to our service members. We developed an action plan to reduce and prevent further exposures from occurring.

Several methods were recommended to reduce the hazards associated with elevated levels of formaldehyde in this scenario: substitution, bake-out of plywood outdoors, source control by barrier application, and dilution ventilation. In the future, pursue another vendor source for lumber (or building materials) with less formaldehyde in it. Secondly, if feasible, place the plywood outdoors allowing it to bake-off the formaldehyde in the hot sun before using it for construction of the shelters. Thirdly, the use of surface barriers has the potential to effectively reduce formaldehyde emissions under real-world building conditions. Finally, providing 100% outdoor air continuously using forced air, such as a fan, during construction is beneficial and should continue for up to four weeks after occupancy.

In conclusion, if appropriate preventive measures are taken during the construction and initial habitation processes of occupying a newly constructed building, formaldehyde exposure will be significantly reduced.

POC: Vickie R. Hawkins, IHFSP, USACHPPM, DSN 584-5462.

TOPIC OF THE MONTH-DEPLOYMENT (con't)

DoD Ergonomic Working Group

Taking a Bite Out of Work-Related Injuries: A Guide for Dental Care Providers

This full-color, 20-page booklet provides dental care providers with the information they need to recognize the symptoms of various work-related musculoskeletal disorders (WMSDs), their causes, and their consequences. The 42nd issue of "DoD Ergonomics Working Group News"--announcing a new booklet and companion pocket card for dental care providers--is available at

Source: www.ergoworkinggroup.org

KEY INDUSTRIAL HYGIENE TOPICS

Nanotechnology

Focus on Nanotechnology' Web Reports on NIOSH Research

NIOSH on July 26, 2005, introduced "Focus on Nanotechnology: Occupational Safety and Health Applications and Implications Research at NIOSH." This web newsletter at www.cdc.gov/niosh/topics/nanotech/focus.html will provide regular, timely information about developments in NIOSH's strategic research program on nanotechnology. NIOSH conducts its multidisciplinary research program with a diverse community of partners under the National Nanotechnology Initiative (NNI). Consistent with the NNI's goals, the program is intended to advance new studies that will help support the responsible development of nanotechnology, and help maintain U.S. competitiveness in this new industrial revolution. The products of this research will help practitioners, with greater certainty, to apply the well-established principles of occupational safety and health to workplace exposures involving nanomaterials.

First International Symposium on Nanotechnology and Occupational Health-Final Report

On July 1, 2005, the United Kingdom Health and Safety Executive (HSE) released the final report from the October 2004 First International Symposium on Nanotechnology and Occupational Health. The conference, co-sponsored by NIOSH and the HSE, brought researchers, decision makers, occupational health professionals and other stakeholders together to discuss what is known and what scientists still need to discover about the occupational impact of nanotechnology. This report includes abstracts from the plenary sessions, workshop summaries and recommendations for addressing existing information gaps. The report can be accessed at www.cdc.gov/niosh/topics/nanotech/1sympfinal.html

International Symposium: Biomedical Aspects of Nano-Toxicology

NIOSH will sponsor an international symposium, "Nano-Toxicology: Biomedical Aspects," on Jan. 29-Feb. 1, 2006, in Miami, Fla. The deadline for registration at the advance rate of $650 is October 1, 2005. There will be an additional $100 charge for registration after October 1 and for on-site registrations. Invited speakers from the U.S. and abroad will address key issues for assessing the toxicology of nanomaterials and determining if such materials pose an occupational health risk. Other sponsoring organizations are the University of Pittsburgh, Inter Health Neutraceuticals, the U.S. Environmental Protection Agency, and Avanti Polar Lipids, Inc., Alabaster (USA). Additional details and a registration form are available at www.pitt.edu/~nanotox/index.htm For a printable copy of the conference information brochure, visit www.pitt.edu/~nanotox/Files/NanoTox_Brochure06.pdf

Mold/Indoor Air Quality

Fungal Types and Concentrations from Settled Dust in Normal Residences

This study presents the results of the collection and analysis of surface dust from 26 residential environments that were prescreened by interview, physical inspection, and air sampling to limit the surface dust collection to structures in which there was no history of water intrusion, flooding, plumbing leaks, signs of mold growth, or evidence of unusual airborne fungal spore types or concentrations. In those structures found to have no history or indications of water events or unusual fungi, surface dust was vacuumed from prescribed horizontal areas on carpet and textile-covered furnishings. These samples were then subjected to fungal culture, from which viable colonies were enumerated and identified. Based on the study results, it does not appear reasonable that the frequently quoted total fungi concentration exceeding 105 CFU/g is definitive evidence that a residential surface is contaminated with unusual amounts of culturable fungi. Collocated samples collected from eight side-by-side carpets sections revealed poor reproducibility. While settled dust sampling may be appropriate for determining the fungal status of a localized area, or as a gross screening tool, using settled dust results alone to establish the presence of unusual fungal types or concentrations within a structure appears to be inappropriate, and using settled dust results with other investigative methods, such as visual observations and air sampling, requires cautious interpretation.

Source: Journal of Occupational and Environmental Hygiene; Volume 2, Number 10 / October 2005

Radiation

OSHA Aligns with Laser Institute of America

The Occupational Safety and Health Administration (OSHA) and the Laser Institute of America have formed an Alliance that focuses on providing access to training resources to help protect worker safety and health particularly by reducing and preventing exposure to laser beam and non-beam hazards in industrial and medical workplaces.

The Alliance calls for OSHA and the institute to work together to develop training and education programs for OSHA staff and employers and employees that use lasers in the workplace. In addition, they will provide laser-related training courses and focus on sharing information on the bio-effects that lasers have on the eyes and skin, laser control measures and laser safety program administration.

Source: www.osha.gov

NIOSH to Present Health Data On Workers at DOE Nuclear Sites

In the ongoing debate over the safety and compensation of workers at nuclear facilities, NIOSH will soon present findings on possible long-term health effects of working in the Department of Energy's (DOE) nuclear weapons complex. The findings will be closely watched by labor activists, who have decried the Department of Labor's (DOL) proposed amendment to DOE workers' compensation law.

NIOSH's presentation at a public meeting on Oct. 27 in Washington, DC, will include research recommendations that may be relevant to former and 300,000 current DOE nuclear-facility workers, the 1.5 million current U.S. radiation workers in other industries and community members around DOE sites.

Source: Inside OSHA, 22 August 2005

https://www.denix.osd.mil/denix/DOD/News/Pubs/OSHA/22Aug05/19.doc.html

Note: DENIX account required (https://www.denix.osd.mil)

Mercury

Discarded Equipment Containing Mercury Now Managed As Universal Waste

A final rule that classifies mercury-containing equipment as universal waste seeks to help eliminate mercury in the environment and encourage mercury recovery and improved, safe management of mercury waste. Previously, unregulated households and some small businesses were not required to manage used mercury containing equipment as a hazardous waste, resulting in some mercury waste getting thrown in the trash. Under this rule, used mercury-containing equipment will be readily collected for recycling or disposal at a properly permitted facility.

Mercury-containing equipment includes various types of instruments that are commonly used in industry, hospitals and households, such as thermometers, barometers and mercury switches. Other items already managed as universal waste include batteries, thermostats and fluorescent lamps.

For more information on the rule -- including a Federal Register notice - Pre-publication Version (signed July 27) -- go to www.epa.gov/epaoswer/hazwaste/recycle/electron/crt.htm

Ergonomics

Study May Help Predict Who Is Most Likely To Develop Repetitive Strain Injury

Who is most likely to develop a repetitive strain injury such as wrist tendonitis or certain kinds of low-back pain?

According to a new study from the Institute for Work & Health in Toronto, Canada, the most vulnerable person would probably be a female college or university graduate employed in a full-time job. If her job is both psychologically and physically demanding and the employer is on the verge of downsizing -- her risk is even higher.

Results of the study, led by Dr. Donald Cole, were published in the July issue of the American Journal of Public Health and announced by the Institute on Aug. 3.

Cole and his team analyzed data from 2,800 individuals across Canada who took part in four successive Statistics Canada's National Population Health Surveys.

The team found that the predictors for RSI included being female (more women than men developed these injuries); having some post-secondary education; and working at a full-time job.

"Women's jobs, especially office jobs and micro assembly work, often involve a high risk for RSI which may explain why more women reported a new RSI in our study," said researcher Harry Shannon, an adjunct scientist and professor at McMaster University. "We also suspect that individuals with more education may be more aware of the link between work, demanding conditions and RSI, and therefore may be more likely to attribute their injury to work."

The study also found that high levels of job insecurity, and jobs with high psychological demands or physical demands (such as manual labor), were strong predictors of RSI. Cole, an expert in workplace interventions, said these are modifiable risk factors and the findings can be used to support efforts for prevention.

Source: The Institute for Work & Health www.iwh.on.ca

Hazardous Materials

Exposure to Silica and Metals Among Painters Using Specular Hematite Abrasive.
This article evaluates the viability of specular hematite as a substitute for silica based on its performance and impact on reducing worker exposures to silica and metals. Since 1993, the Center to Protect Workers' Rights, the research arm of the Building and Construction Trades Department, has developed and used a task-based approach to assessing and controlling occupational health hazards in construction. The Task-Based Exposure Assessment Model (T-BEAM) approach was applied to characterize silica exposures among trades engaged in abrasive blasting, masonry work, and milling operations beginning in 1999. Since the T-BEAM approach emphasizes the identification and evaluation of engineering and work practice controls, the authors sought to assess a substitute abrasive that conformed to U.S. National Institute of Occupational Safety and Health's 1974 recommendation to prohibit the use of silica sand and other substances containing more than one percent silica.
Source: Journal of Occupational & Environmental Hygiene; Aug2005, Vol. 2 Issue 8, p60, 5p
http://search.epnet.com/login.aspx?direct=true&db=aph&an=17321884

ACOEM Calls For Employers To Implement Medical Surveillance Programs For Silica More than one million U.S. workers are exposed to crystalline silica -- a basic component of soil, sand, granite and other minerals, quartz being its most common form. Of these workers, more than 100,000 participate in activities associated with high risk of silica exposure, including mining, rock drilling, construction activities, and foundry work.
Silicosis is incurable; however, it is preventable if a proper workplace medical surveillance program is implemented, according to a new a position statement by the American College of Occupational and Environmental Medicine (ACOEM).
"It is important to stress that the single most important aspect for preventing silicosis and other silica-associated diseases is limitation of exposure which can be achieved through engineering and administrative controls," said Lawrence W. Raymond, MD, co-lead author of the statement. "A workplace medical surveillance program helps to ensure that exposure is appropriately limited ... only when employers, workers, and physicians and other health professionals take the team approach to medical surveillance can exposures to silica be reduced or eliminated."
When workers inhale silica dust, the dust enters the lungs and may cause the formation of scar tissue, which in turn can reduce the lungs' ability to take in oxygen. Workers exposed to silica are in danger of developing silicosis -- an irreversible and sometimes fatal disease. And, since silicosis affects lung function, workers can develop other lung disorders, including tuberculosis, chronic bronchitis, and cancer.
ACOEM advocates the implementation of medical surveillance programs for the primary purpose of detecting adverse health effects early on so that the progression of the disease can be halted.
"A medical surveillance process provides an organized means of identifying cases of silicosis as early as possible, and such early identification can help identify problems for groups of workers and for an individual worker simultaneously," said Stephen Wintermeyer, MD, MPH, co-author and past chair of the College's Occupational and Environmental Lung Disorders Committee, which developed the statement. "The goal remains to prevent and eventually eliminate silicosis both nationally and internationally."
The position statement outlines a surveillance program that would require that all at-risk workers be given a baseline evaluation before they begin the job, with follow-up evaluations conducted one year after being hired and every three years following that. In addition, an exit evaluation should be performed upon the conclusion of employment.
Medical Surveillance of Workers Exposed to Crystalline Silica is available online at
www.acoem.org/guidelines/article.asp?ID=82

Health Hazard Evaluation (HHE): Metals Exposures at a Scrap Metal Recycling Facility
Company managers requested NIOSH assistance in assessing the need for showers for employees exposed to lead. For workers cutting scrap metal with oxygen and propane torches, NIOSH investigators found exposures to lead, cadmium, nickel, copper, and arsenic above the Occupational Safety and Health Administration (OSHA) permissible exposure limit or NIOSH recommended exposure limit. NIOSH informed the employer of the need to comply with the substance-specific OSHA standards for lead, cadmium, and arsenic, including the requirement for employee showers and also made recommendations regarding local exhaust ventilation and air monitoring for welding gases. The full report is available at www.cdc.gov/niosh/hhe/reports/pdfs/2003-0367-2973.pdf More information on HHEs can be found at www.cdc.gov/niosh/hhe

Noise

Health Hazard Evaluation (HHE): Noise Exposures among Medical Transcriptionists
A local union representing medical transcriptionists at several California hospitals submitted a health hazard evaluation (HHE) request because of concerns about excessive noise exposures. Through a field evaluation and an extensive laboratory study, NIOSH investigators evaluated noise levels delivered through headsets transcriptionists wear while recording medical records onto computer files. NIOSH investigators determined that noise levels can be excessive when specific settings are used on the dictaphone. NIOSH recommended strategies to reduce the noise levels and improve the clarity of the dictation and noted that it may be prudent to implement routine audiometric testing. The report is available at www.cdc.gov/niosh/hhe/reports/pdfs/2003-0273-2974.pdf More information on HHEs can be found at http://www.cdc.gov/niosh/hhe

Noise and Carbon Monoxide Increase Risk of Hearing Loss
Researchers at the University of Montreal have gathered evidence showing that combined chronic exposure to noise and carbon monoxide in the workplace induces hearing loss.
Adriana Lacerda, researcher at the École d'Orthophonie et d'Audiologie of the Université de Montréal, presented her findings at the annual meeting of the Acoustical Society of America in Vancouver.
Those findings are the result of a study conducted with over 8,600 workers exposed to both noise and carbon monoxide in the workplace. Among the riskier professions are welders, firefighters, garage mechanics, truckers, forklift operators and miners.
The correlation between carbon monoxide exposure and hearing loss had been established in previous animal studies but never in humans. Based on data gathered by the National Institute of Occupational Safety and Health, Lacerda compared the hearing of workers exposed to noise levels lower than 90 decibels for 8 hours to another group of workers exposed to noise levels above 90 decibels. In both groups, a sample of workers was also exposed to carbon monoxide. The results revealed that the workers who were exposed to carbon monoxide and to noise levels above 90 decibels displayed significantly poorer hearing thresholds at high frequencies (from 3 to 6 kiloHertz). A larger shift was observed among workers with 25-29 years of noise exposure in the workplace.
Source: www.fsmmag.com ,August 2005

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KEY INDUSTRIAL HYGIENE TOPICS (con't)

Top AIHA Officer Wants Construction Hearing Rule Advanced

The American Industrial Hygiene Association's president, Roy Buchan, sent a letter Aug. 22 urging OSHA's acting chief to accelerate work on a hearing conservation rule for construction workers. Buchan's letter noted AIHA had taken an active role in OSHA's consideration of this rule since May 2000.

OSHA's most recent semi-annual agenda listed the rule as a "long-term action" with no timetable for additional action. That is a limbo status in which no work might be done on a rule; while the last two OSHA bosses have said their agendas reflect real priorities and actions, long-term is a handy bin for any rule too controversial or complex to issue but too politically important to kill outright.

"For over 21 years construction workers have not been afforded the same legal protections from hearing loss as have their industrial counterparts," Buchan's letter states. "Over 700,000 workers are at risk and many lose significant hearing after only 10-15 years on the job." Noise exposure evaluation is necessary for workers with potential for exposure above 85 dBA, and training of all construction workers is essential, he wrote.

SAFETY ISSUES

Workplace Safety Models Help Safety Professionals Deliver 'Safety Pays' Message

Tools to more accurately calculate, analyze, interpret and communicate the costs and benefits of workplace safety and health programs are featured as part of published proceedings released on July 29 in the National Safety Council's Journal of Safety Research (Volume 36, Number 3).

The CERSSO Tool Kit was developed by Rafael Amador Rodezno, MD, MPH., MSc, Nicaragua, for use in Central American garment factories. The model integrates risk assessments, cause-effect relationships, decision making, direct and indirect costs and savings, and calculating cost-benefit ratios to measure the financial rewards of investing in occupational safety and health.

Participation for Understanding: An Interactive Method, developed by Ernst Koningsveld, The Netherlands, promotes a more user-friendly model for measuring safety and health effectiveness that includes engaging workers, managers and health and safety experts in discussions about costs, efforts, benefits and effectiveness of prevention efforts to ensure that outcomes are understood by all involved.

The Potential Method: An Economic Evaluation Tool, developed for use in Finland and Sweden by Dr. Monica Bergstrom, Finland, offers a valid economic calculation for measuring the effect of safety and health on production that reflects changes in the work environment. The model allows for more than 300 variables but requires only about 12 to obtain an economic analysis of a change in working conditions.

Net-Cost Model for Workplace Interventions, developed for WHO by Supriya Lahiri, PhD, United States, is an approach for the economic evaluation of efforts to reduce work-related low back pain. The study provides a simple framework for estimating the net economic costs of investments in ergonomic interventions at the company level.

Return on Health, Safety and Environmental Assessments (ROHSEI), developed by ORC and presented by Joanne B. Linhard, ORC Worldwide, Washington D.C., is a process and supporting tool set developed for use by occupational health, safety and environmental professionals and others to provide a comprehensive look at investment decisions as well as answer such key questions as, "What SH&E investments should we make?" "When should we make them?" "Which investments create the greatest value to the organization?" And so on. More than 200 companies, government agencies and educational institutions have been trained in the ROHSEI process since the mid 1990s.

Source: www.asse.org

2005 National Safety Survey: Focusing on Employees

Can safety professionals build successful programs in an era of tight resources? The answer depends on whether they have the skill to engage managers and employees in the process, according to the 2005 National Safety Survey conducted by "Occupational Hazards." In this survey, over 1,400 safety and health personnel responded to key questions concerning health and safety management through an Source: Occupational Hazards , August 2005, Vol. 67 Issue 8, pg 19, www.occupationalhazards.com/articles/13907

Realistic, Cost-Effective Ergonomics for Real People

Using a simpler approach to ergonomics and stressing design that fits actual workers can reduce costs and result in a safer, more productive workplace. Keeping things simple accomplishes a couple of worthy goals. One benefit is that ergonomics becomes accessible to more people when it is simplified. The second benefit of using a simpler ergonomic approach is that jobs are assessed in a time-efficient manner and conclusions are reached more quickly. *Source: Occupational Hazards, August 2005, Vol. 67 Issue 8, pg 44,* www.occupationalhazards.com/articles/13906

Driving – The Forgotten Side of Safety

Is your company taking steps to prevent the leading cause of injury and death for American workers? Traffic crashes far exceed any other cause of death for American workers. About one in four fatal work injuries in 2003 occurred in highway incidents. Annually, nearly twice as many people are killed in the workplace as a result of traffic crashes than for any other reason. A person who drives as a part of the job is three times more likely to be killed or seriously injured than a person who works in a controlled factory environment. So why does driver safety receive so little attention?

Source: Occupational Hazards, Aug2005, Vol. 67 Issue 8, p33
www.occupationalhazards.com/articles/13905

Taking the Headache Out of Small Spills

Big spills often have the misfortune of becoming front-page news, but what about those little spills that happen at facilities every day? Various federal Occupational Health and Safety (OSHA) and Environmental Protection Agency (EPA) regulations require facilities to create plans and be prepared to handle spills. Most facilities have taken the time to create response plans and stockpile or earmark items for response to major catastrophes. Unfortunately, small or routine spills are sometimes overlooked or viewed as a maintenance – not spill response – function. Taking a closer look at these more common spills can help facilities be better prepared to safely handle these situations.

Source: Occupational Hazards, August 2005, Vol. 67 Issue 8, pg. 15
www.occupationalhazards.com/articles/13669

VPP: What it Takes to Be a Star

Space Gateway Support (SGS), a joint venture created to provide launch support and base operations services to Kennedy Space Center, Cape Canaveral Air Force Station and Patrick Air Force Base, is one of nearly 1,300 worksites participating in Voluntary Protection Programs (VPP) through state plans and federal OSHA. Their proposal to the government included their commitment to become an OSHA Star company and in doing so, demonstrate to their customers and their employees their core value of workplace safety and health excellence says John Storm, director of Facilities Management Services, Space Gateway Support. When management at SGS launched on the VPP process, some employees and managers needed convincing that it was the way to go. The contractors who formed the joint venture had very good safety and health compliance programs, according to Storm, and employees already were accustomed to strict safety regulations concerning the numerous hazards

of the space launch business.
Source: Occupational Hazards.: Aug 2005. Vol. 67, Iss. 8; p. 27
http://proquest.umi.com/pqdweb?index=23&did=886455511&SrchMode=3&sid=1&Fmt=6&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1126009822&clientId=72171&aid=1

New BLS Data Likely to Revive Debate Over Workplace Violence
As the Bureau of Labor Statistics (BLS) prepares to release 2004 data on workplace fatalities, organized labor remains concerned that OSHA is not doing enough to address injuries and deaths on the job. OSHA has addressed the issue in a guideline and several Alliances with organizations such as the American Association of Occupational Health Nurses, but some organized labor sources are calling for an OSHA standard, saying OSHA rarely uses the general duty clause to cite companies for hazards arising from violence.
Source: Denix "Inside OSHA," 22 August 2005
https://www.denix.osd.mil/denix/DOD/News/Pubs/OSHA/22Aug05/04.doc.html
Note: DENIX account required https://www.denix.osd.mil

Industry Challenges State Law To Keep Guns Off Company Property
In a declared effort to curb workplace violence, an industry alliance headed by energy giant ConocoPhillips is challenging an Oklahoma law that allows workers to keep guns in their locked cars on company property.
OSHA declined to comment on the lawsuit. The agency has a guideline on workplace violence, but not a formal rule (see related story).
"ConocoPhillips supports the Second Amendment and respects the rights of law abiding citizens to own guns. Our primary concern is the safety of all our employees," said a spokesperson for ConocoPhillips, the company that owns Phillips 66 gas stations. "We are simply trying to provide a safe and secure working environment for our employees by keeping guns out of our facilities, including our company parking lots."
The National Rifle Association (NRA) has vowed to boycott all companies that enforce anti-gun policies, and on Aug. 1 launched a nationwide billboard campaign "ConocoPhillips is No Friend of the Second Amendment."
"If you are a corporation that's anti-gun, anti-gun owner, or anti-Second Amendment, we will spare no effort or expense to work against you, to protect the rights of your law-abiding employees. Their rights are worth more than your money!" NRA Executive Vice President Wayne LaPierre said that day at a public meeting in Idabel, OK.
In 2002, Weyerhaeuser Co. fired 12 workers in Idabel for keeping guns in their cars. The incident caused a public outcry and the adoption of the law ConocoPhillips and others are now trying to overturn. (Complete article)
Source: Inside OSHA, 22 August 2005
https://www.denix.osd.mil/denix/DOD/News/Pubs/OSHA/22Aug05/05.doc.html
Note: DENIX account required https://www.denix.osd.mil

Illinois Passes Violence Protection Law for Mental Health Facilities
Illinois on July 28 passed a state law that requires mental health facilities participating in a two-year pilot program, and eventually all such sites, to implement measures protecting workers from violence. The law is hailed as a major victory by the Illinois Nurses Association and other organized labor groups.
Legislators decided that although many workplaces have undertaken efforts to ensure that patients, visitors and employees are safe from violence, additional personnel training and appropriate safeguards may be needed to prevent workplace violence.
Five mental health centers will participate in a pilot study over the coming two years. Employees at these facilities must receive regular violence prevention training starting July 1, 2006 that addresses violence-predicting factors,

restraining techniques and appropriate uses of medications to reduce violent behavior, among other things. All other facilities will follow by July 1, 2009.
Pilot project participants will implement violence prevention plans before July 1, 2007 (all others by July 1, 2008) to address staffing, emergency procedures, incident reporting and training. The plans must be reviewed and reported to the Department of Human Services every three years starting July 1, 2006 (or a year later).
The Health Care Workplace Violence Prevention Act also requires mental health facilities to keep a record of all on-site violent acts against employees, patients or visitors. Government audits will include reviews of these reports. (Complete article.)
Source: Inside OSHA, 22 August 2005
https://www.denix.osd.mil/denix/DOD/News/Pubs/OSHA/22Aug05/15.doc.html
Note: DENIX account required (https://www.denix.osd.mil)

Homeland Security - GAO Finds USPS Needs Better Guidance For Dealing With Suspicious Mail
The United States Postal Service (USPS) has agreed to change the way it trains employees to handle suspicious packages following a Government Accountability Office (GAO) investigation of an incident at a Greenville, SC airmail facility in 2003.
On Oct. 15, 2003, a postal worker found a suspicious package with no return address and the words " caution RICIN POISON Enclosed in sealed container Do not open without proper inspection" written on the front of the envelope. The package was found at midnight. It wasn't until six days later, on Oct. 21, that the Centers for Disease Control and Prevention confirmed that the substance was ricin. The poison was in a tightly sealed container and therefore posed no threat to employees.
Source: Inside OSHA, 22 August 2005
https://www.denix.osd.mil/denix/DOD/News/Pubs/OSHA/22Aug05/13.doc.html
Note: DENIX account required (https://www.denix.osd.mil)

INDUSTRIAL HYGIENE PROFESSIONAL NEWS

OSHA

OSHA Announces Targeted Inspection Plan for 2005
OSHA will focus on about 4,400 high-hazard worksites for unannounced comprehensive inspections over the coming year during its 2005 site-specific targeting plan www.osha.gov/OshDoc/Directive_pdf/CPL2_05-05.pdf
"Our targeted inspection program maximizes the effectiveness of our inspection resources to those workplaces with the highest safety and health hazards," said Jonathan L. Snare, deputy assistant secretary of labor for OSHA. "This program gives us the opportunity to focus our enforcement efforts where it will have the most benefit for workers and employers."
Over the past seven years, OSHA has used a site-specific targeting inspection program based on injury and illness data. This year's program (SST-05) stems from the agency's Data Initiative for 2004, which surveyed approximately 80,000 employers to attain their injury and illness numbers for 2003.
This year's program will initially cover about 4,400 individual worksites on the primary list that reported 12 or more injuries or illnesses resulting in days away from work, restricted work activity, or job transfer for every 100 full-time workers (known as the DART rate). The primary list will also include sites based on a "Days Away from Work Injury and Illness" (DAFWII) rate of nine or higher (nine or more cases that involve days away from work per 100 full-time employees). Employers not on the primary list that reported DART rates of between 7.0 and 12.0, or DAFWII rates of between 5.0 and 9.0, will be placed on a secondary list for possible inspection. The national incident DART rate in 2003 for private industry was 2.6, while the national incident DAFWII rate was 1.5.

OSHA (con't)

OSHA will again inspect nursing homes and personal care facilities, but only the highest 50 percent rated establishments will be included on the Primary List. Inspections will focus primarily on ergonomic hazards relating to resident handling; exposure to blood and other potentially infectious materials; exposure to tuberculosis; and slips, trips and falls.

The agency also will randomly select and inspect about 400 workplaces (with 75 or more employees) across the nation that reported low injury and illness rates for the purpose of reviewing the actual degree of compliance with OSHA requirements. These establishments are selected from those industries with above the national incident DART and DAFWII rates.

Finally, the agency will include on the primary list some establishments that did not respond to the 2004 data survey.

Significant changes in this year's plan are:

- Change the threshold DART rate and DAFWII case rate for the Primary and Secondary Inspection Lists.
- Increase the number of low-rate establishments from high-rate industries that are added to the Primary Inspection List.
- Revise the provision concerning OSHA's Enhanced Enforcement Program (EEP).
- Add to the Primary Inspection List some establishments that did not respond to the 2004 OSHA Data Initiative survey.
- Add a Tertiary Inspection List.
- Add a provision to clarify procedures when an establishment is an Office Only site.
- Require compliance officers to conduct only a comprehensive safety inspection in most situations.
- Revise the criteria for establishments to receive a "records only" inspection.

Expansion of OSHA Coverage

Rep. Phil English (R-PA) has introduced HR 3473, a bill that would amend the OSH Act to provide coverage for all federal and state government employees, employees of political subdivisions of a State, or any interstate governmental agency.

ANSI

Occupational Health and Safety Management Systems

Organizations that want to improve their occupational health and safety performance, productivity, financial performance, quality, and other organizational and business objectives now have a new tool. ANSI/AIHA Standard Z10, Occupational Health and Safety Management Systems helps businesses comprehensively integrate occupational health and safety management into business practices and systems. The American Industrial Hygiene Association (AIHA) led the development of ANSI/AIHA Standard Z10 as secretariat for the Z10 Committee, which included experts from labor, government, professional organizations and industry.

Development included extensive examination of current national and international standards, guidelines and practices, and the resulting standard is compatible with relevant OHS, environmental, and quality management standards, such as International Organization for Standardization (ISO) 9000 and 14000, and with approaches to OHS management in common use in the United States. It focuses on principles that are broadly applicable to organizations of all sizes and types, not on detailed specifications. The approved standard is being prepared for publication and will be available in mid-September.

Moveable Gas Connectors

Whether in the back of a neighborhood restaurant or a four-star hotel, the fast pace of a commercial kitchen swirls around heavy-duty equipment with many potential hazards. Safety in these environments is key. Now, updated standards will enhance safety and sanitation in commercial kitchens by requiring that commercial-grade moveable gas connectors be used for all equipment that is moved on a regular basis for cleaning or maintenance. The updates were recently made in the American National Standard Institute/Canadian Standards Association standard, ANSI Z21.69/CSA 6.16, and the National Fuel Gas Code, ANSI Z223.1/NFPA 54.

Moveable gas connectors provide a safer, cleaner option than other frequently used methods. Stationary (residential-grade) connectors in a commercial kitchen can increase the risk of injury and property loss due to fire and explosion, and lack a smooth "wipe clean" surface. This increases the risk for accumulating bacteria that increases the probability of food contamination or food-borne illness. Further, hard-piped installations that do not allow for the movement of appliances for cleaning can result in the buildup of dangerous grease and bacteria, which could lead to a fire and or food contamination.

Source: www.ansi.org

American Board of Industrial Hygiene (ABIH)

Examinations 2004	#Examinees	#Who Passed	%Who Passed
Comprehensive	Spring 222	86	38.2%
Practice	Fall 228	86	

Certification in Industrial Hygiene is a hallmark of expertise and dedication, and a challenge to obtain, evidenced by the low pass rate. The examination is difficult and once CIH is achieved, it is imperative to maintain through work, professional development, teaching and publishing.

Source: www.abih.org

Training

World Safety Congress and National Safety Council to Meet in September

Safety and health experts from around the world will gather in Orlando, Florida this fall for two prominent international and national conferences. On September 18-22, 2005, NIOSH along with a number of other private and public sector organizations will co-support the XVIIth World Congress on Safety and Health at Work. The Congress, jointly organized by the International Labor Organization, the International Social Security Association and the National Safety Council, will serve as an international forum for approximately 3000 professionals to exchange ideas, research, and best practices on highly topical issues in the area of occupational safety and health. This marks the first time the Congress will be held in the U.S. www.safety2005.org

Coinciding with the World Safety Congress, the National Safety Council Congress and Expo will run from September 21-23, 2005 at the same location. The Congress will feature over 200 sessions ranging from broad-based to industry-specific topics for the seasoned professional and newcomers to safety and health. The Expo is the world's largest annual safety and health exhibit, where more than 750 exhibiting companies demonstrate and showcase the latest in safety materials and products. www.congress.nsc.org

GREAT LINKS TO OTHER SITES

INDUSTRIAL HYGIENE LINKS

http://www.osha.gov

The Occupational Safety and Health Administration (OSHA) is a Federal agency under the Department of Labor which sets and enforces occupational health and safety regulations, such as the Permissible Exposure Limits (PELs). OSHA's mission is also to provide training, outreach and education; establish partnerships' and encourage continual improvement in workplace safety and health.

http://www.cdc.gov/niosh/homepage.html

The National Institute for Occupational Safety and Health (NIOSH) is the federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness. NIOSH is part of the Centers for Disease Control and Prevention (CDC) in the Department of Health and Human Services.

http://www.aiha.org/

The American Industrial Hygiene Association (AIHA) is a nonprofit organization with more than 75 local sections. AIHA's 12,000 members are highly educated professionals; 96 percent are college graduates, 61 percent hold master's degrees, and 6 percent possess doctoral degrees. AIHA is one of the largest international associations serving the needs of occupational and environmental health professionals practicing industrial hygiene in industry, government, labor, academic institutions, and independent organizations.

http://www.acgih.org/home.htm

The American Conference of Governmental Industrial Hygienists (ACGIH®), has been considered a well-respected organization by individuals in the industrial hygiene and occupational health and safety industry f or over 65 years. Undoubtedly the best known of ACGIH®'s activities, the Threshold Limit Values for Chemical Substances (TLV®) Book, list 642 chemical substances and physical agents, as well as 38 Biological Exposure Indices for selected chemicals.

http://www.abih.org/

The American Board of Industrial Hygiene (ABIH®), a not-for-profit corporation, was organized to improve the practice and educational standards of the profession of industrial hygiene. The activities presently engaged in for carrying out this purpose are:

1. Offering certification examinations to industrial hygienists with the required educational background and professional industrial hygiene experience;
2. Acknowledging individuals who successfully complete the examination by issuing a certificate;
3. Requiring Diplomats to maintain their certification by submitting evidence of continued professional development; and
4. Maintaining records and publishing a roster of certificate holders for the profession and the public.

http://www.iaqa.org/

The Indoor Air Quality Association (IAQA) was established in 1995 to promote uniform standards, procedures and protocols in the Indoor Air Quality industry. Since its inception, IAQA has become a leader in training and education for IAQ practitioners. The association is committed to education and research, and serves as a forum for the exchange of ideas within the emerging IAQ field.

ARMY-RELATED INFORMATION

https://www.us.army.mil/suite/login/welcome.html

The Army Portal, ***Army Knowledge Online (AKO)***, is a primary component of The Army Knowledge Management (AKM) strategy and The Army Transformation. As the single point of entry into a robust and scalable knowledge management system, AKO is strategically changing the way The Army does business. By enabling greater knowledge sharing among Army communities, AKM fosters improved decision dominance by commanders and business stewards in the battle space, organizations, and Army's mission processes.

https://crc.army.mil/home/

The United States Army Combat Readiness Center (CRC) is the center of gravity where all loss-related areas overlap. It is leading edge, proactive, and focused on the Soldier through investigation and predictive analysis. The raises the level of awareness for the Soldier to help him/her better manage risk and improve combat readiness.

https://www.denix.osd.mil/denix/denix.html

The Defense Environmental Network & Information Exchange (DENIX) is the central platform and information clearinghouse for environment, safety and occupational health (ESOH) news, information, policy, and guidance. Serving the worldwide greater Department of Defense (DoD) community, DENIX offers ESOH professionals a vast document library, a gateway to web-based environmental compliance tools, an interactive workgroup environment, a variety of groupware tools and an active membership community numbering thousands. DENIX provides ESOH professionals an up-to-date, multi-functional resource to assist in preserving and protecting the natural environment, achieving greater energy efficiency, providing a safer and healthier work environment and meeting readiness and compliance needs of Congressional and DoD ESOH requirements.